

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* BURLEIGH M. HUTCHINS, RANDALL B. RUBINSTEIN,  
BARRY T. HIXON and WILLIAM J. BUOTE

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Appeal No. 96-1808  
Application 08/204,119<sup>1</sup>

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ON BRIEF

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Before KIMLIN, GARRIS and OWENS, *Administrative Patent Judges*.  
OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This is an appeal from the examiner's final rejection of claims 1-8, 10-37 and 45-50, which are all of the claims

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<sup>1</sup> Application for patent filed March 1, 1994. According to appellants, the application is a division of Application 08/091,848, filed July 14, 1993, now abandoned.

remaining in the application.

*THE INVENTION*

Appellants' claimed invention is directed toward an apparatus for testing the dissolution of a material such as a pharmaceutical formulation unit (specification, page 1, lines 2-22). The apparatus includes a head supported above a vessel. The head can include devices for filling the vessel, sampling the liquid contents of the vessel, aspirating liquid from the vessel, measuring the temperature of the liquid in the vessel, and introducing a cleaning liquid into the vessel. Claim 1 is illustrative and reads as follows:

1. A dissolution testing system comprising:

base means;

a plurality of vessels mounted in situ on said base means;

agitation means for agitating a liquid content of said vessels; said agitation means comprising a paddle disposed in each vessel, a drive shaft coupled to each paddle, and drive means for rotating said drive shafts; and

head means supported above each of said plurality of vessels and comprising fill means operable to automatically inject a liquid media into said vessel;

said head means further comprising liquid media handling

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means mounted for movement relative to said vessel and said shaft therein, said movement having a component parallel thereto.

*THE REFERENCES*

Smolen 1981	4,279,860	Jul. 21,
Cosgrove, Jr. et al. (Cosgrove) 1986	4,578,244	Mar. 25,
Schneider (Schneider '657) 1988	4,754,657	Jul. 5,
Schneider (Schneider '716) 1990	4,924,716	May 15,

*THE REJECTIONS*

Claims 1-8, 10-37 and 45-50 stand rejected under 35 U.S.C. § 103 as being unpatentable over Schneider '716 in view of Cosgrove, Schneider '657 and Smolen. Claims 25 and 26 also stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention.

*OPINION*

We have carefully considered all of the arguments

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advanced by appellants and the examiner and agree with appellants that the aforementioned rejections are not well founded. Accordingly, we do not sustain these rejections.

*Rejection under 35 U.S.C. § 103*

*Claims 1-8, 10-33 and 45-48*

Among claims 1-8, 10-33 and 45-48, there are three independent claims, namely, claims 1, 30, and 32. Claim 1 requires that the head means includes a liquid media handling means which is mounted for movement relative to the vessel and to the shaft in the vessel, the shaft being coupled to a paddle. In claim 30, the liquid media handling means is a sampling means, and in claim 32 it is an aspiration means. Each of the sampling means and aspiration means is mounted for movement relative to the vessel and paddle therein.

The examiner argues that Cosgrove discloses a liquid media handling means (16, 212 and 142) mounted for movement relative to the vessel (12) and shaft (32) of the paddle (28), and that it would have been obvious to one of ordinary skill in the art to use Cosgrove's liquid media handling means with

the Schneider '716 apparatus (answer, pages 5-6).

The examiner's argument is deficient in that the examiner has not explained why, if Cosgrove's liquid media handling means were used with the apparatus of Schneider '716, the liquid media handling means would be capable of movement relative to both the vessel and the paddle. Cosgrove's vessel and paddle move together because each vessel has a paddle mounted therein (col. 12, lines 52-57). In the Schneider '716 apparatus, the paddle is attached to bridge 4, which the examiner considers to

be the head recited in appellants' claims, and is movable in the vertical direction relative to the vessel which is attached to support 6, which is movable in the horizontal direction (figure 2). Thus, if Cosgrove's liquid media handling means were attached to the Schneider '716 bridge 4, it would not move relative to the shaft or paddle, and if Cosgrove's liquid media handling means were attached to the Schneider '716 movable support (6), it would not move relative to the vessel. Hence, it does not appear that the combination proposed by the examiner would produce the claimed invention

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wherein the liquid media handling means is movable relative to both the vessel and the shaft or paddle.

The examiner, therefore, has not carried his burden of establishing a *prima facie* case of obviousness of the apparatus recited in appellants' claims 1-8, 10-33 and 45-48. Consequently, we reverse the rejection of these claims under 35 U.S.C. § 103.

*Claims 34-37*

Appellants' claim 34, and claims 35-37 which depend therefrom, require that the head means includes a temperature sensor for detecting the temperature of the liquid in the vessel,

and that the temperature sensor is mounted relative to the vessel and paddle therein.

The examiner relies upon Schneider '657 for a teaching of the use of a thermostat in a dissolution testing apparatus (answer, pages 6-7). The examiner, however, does not explain why the applied references would have fairly suggested, to one of ordinary skill in the art, mounting the temperature sensor

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for movement relative to the vessel and paddle therein. The Schneider '657 thermostat (6) appears to be fixed in place (figure 1; col. 2, lines 52-56).

Accordingly, we conclude that the examiner has not carried his burden of establishing a *prima facie* case of obviousness of the apparatus recited in appellants' claims 34-37.

*Claims 49 and 50*

Appellants' claim 49, and claim 50 which depends therefrom, require a fill means which is capable of automatically injecting a liquid media into the vessel, a sample means which is capable of automatically withdrawing a liquid sample from the vessel in situ, and a wash means which is capable of automatically introducing a cleaning liquid into each vessel in situ.

The examiner considers the Schneider '716 rinsing nozzles (18) to be both the fill means and the wash means (answer, pages 4 and 10). The examiner, however, has not

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established that the Schneider '716 rinsing nozzles are capable of performing the function of appellants' fill means, or that the applied references would have led one of ordinary skill in the art to modify the Schneider '716 apparatus such that the rinsing nozzles would have that capability.

Moreover, the claims require that the sampling means is capable of withdrawing a sample from the vessel in situ, and that the wash means is capable of introducing a cleaning liquid into the vessel in situ. We give the term "in situ" its broadest reasonable interpretation consistent with appellants' specification. See *In re Zletz*, 893 F.d. 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); *In re Sneed*, 710 F.d. 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983); *In re Herz*, 537 F.d. 549, 551, 190 USPQ 461, 463 (CCPA 1976); *In re Okuzawa*, 537 F.d. 545, 548, 190 USPQ 464, 466 (CCPA 1976). In doing so, we find that the term means that both the sampling and washing take place when the vessel is fixed in place on a rack base and the control head is mounted in place above it (specification, page 7, lines 15-25). Thus, the term excludes sampling while the vessel is in one position below the

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Schneider '716 test stand and washing the vessel while it is in another position below the Schneider '716 rinsing stand, as shown in figure 2 of Schneider '716. This interpretation of "in situ" is consistent with the meaning given to that term by appellants (brief, page 16). The examiner has not explained why the applied references would have fairly suggested, to one of ordinary skill in the art, the recited in situ capability.

For the above reasons, we conclude that the examiner has not carried his burden of establishing a *prima facie* case of obviousness of the apparatus recited in appellants' claims 49 and 50.

*Rejection under 35 U.S.C. § 112, second paragraph*

The relevant inquiry under 35 U.S.C. § 112, second paragraph, is whether the claim language, as it would have been interpreted by one of ordinary skill in the art in light of appellants' specification and the prior art, sets out and circumscribes a particular area with a reasonable degree of precision and particularity. See *In re Moore*, 439 F.d. 1232, 1235, 169 USPQ 236, 238 (CCPA 1971).

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The examiner argues that "Ph" in appellants' claim 25 is confusing and should be "pH" (answer, page 3). The examiner's understanding of the intended meaning of "Ph" indicates that the term would have been reasonably clear to one of ordinary skill in the art. Moreover, the examiner has not explained why, in light of the appearance of the term as "pH" in appellants' specification (page 1, line 24; page 8, lines 12 and 13), "Ph" in appellants' claim 25, when interpreted by one of ordinary skill in the art in light of appellants' specification and the prior art, would not set out and circumscribe a particular area with a reasonable degree of precision and particularity.<sup>2</sup>

The examiner argues that "media source" in appellants' claim 26 is vague and indefinite because it could mean the aspiration probe, the media liquid, the sample probe or a media sample and, therefore, is a broad term (answer, page 3). This is not a sound basis for an indefiniteness rejection,

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<sup>2</sup> In appellants' claim 25 in the appendix to their brief, "pH" appears correctly, which indicates that appellants may have considered the claim to have been amended to change "Ph" to "pH". In any event, upon return of the application to the examiner, appellants and the examiner should amend claim 25 so that "pH" appears correctly.

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because a claim is not indefinite merely because it is broad. See *In re Gardner*, 427 F.d. 786, 788, 166 USPQ 138, 140 (CCPA 1970) ("Breadth is not indefiniteness."); *In re Borkowski*, 422 F.d. 904, 909, 164 USPQ 642, 645-46 (CCPA 1970).

Appellants' specification states that tank 92 is a media tank (page 10, line 11) and that during operation, liquid media flows from the media tank 92 to the vessels (page 11, lines 19-20). The examiner has not explained why "media source", when interpreted by one of ordinary skill in the art in light of disclosures such as this in appellants' specification, and in light of the prior art, would not set out and circumscribe a particular area with a reasonable degree of precision and particularity.

For the above reasons, we do not sustain the rejection of claim 25 or claim 26 under 35 U.S.C. § 112, second paragraph.

#### DECISION

The rejections of claims 1-8, 10-37 and 45-50 under 35 U.S.C. § 103 over *Schneider '716* in view of *Cosgrove*, *Schneider '657* and *Smolen*, and of claims 25 and 26 under 35 U.S.C. § 112, second paragraph, as being indefinite for

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failing

to particularly point out and distinctly claim the subject  
matter

which appellants regard as their invention, are reversed.<sup>3</sup>

*REVERSED*

EDWARD C. KIMLIN	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
BRADLEY R. GARRIS	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
TERRY J. OWENS	)	
Administrative Patent Judge	)	

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<sup>3</sup> Smolen, which was relied upon by the examiner (answer, page 6) for a suggestion of injecting a pH adjustment solution into the vessel as recited in some of the dependent claims, does not remedy any of the deficiencies of the previously-discussed references as to the independent claims.

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